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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/847,322	05/03/2001	Rex A. Nisbet	1378.0030000	5586

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WASHINGTON, DC 20005

EXAMINER

TORRES, MARCOS L

ART UNIT	PAPER NUMBER
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2683

DATE MAILED: 09/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/847,322

Applicant(s)

NISBET, REX A.

Examiner

Marcos L Torres

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 5 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Talaro.

As to claim 1, Talaro discloses a base station for a mobile radio system (see col. 1, lines 8-10), including: a plurality of repeaters that provide respective radio channels (see col. 8, lines 58-65); a station controller connected to each repeater; and a radio antenna system connected to the repeaters (see col. 9, lines 4-6); wherein the repeaters provide a control channel and a plurality of traffic channels for mobile users, with allocation of the control channel being varied among the traffic channels (see col. 9, lines 7-31).

As to claim 5, Talaro discloses a base station wherein: allocation of the control channel among the repeaters is determined by the station controller (see col. 9, lines 4-22).

Regarding claim 11 is the corresponding method claims of apparatus claims 1. Therefore, claim 11 is rejected for the same reason shown above.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 3-4, 7 and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Talaro in view of Hagio.

As to claims 3, 7 and 9, Talaro discloses the method wherein the base station: allocates the control channel and a plurality of traffic channel (see col. 9, lines 7-31). Talaro do not specifically discloses that the control channel is changed periodically or non-periodically among the repeaters in a random process. Hagio discloses that the control channel is changed periodically among the repeaters (see constitution). Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to change the control channel in order to avoid interference.

As to claims 4 and 10, Talaro discloses a base station wherein: each repeater normally provides a traffic channel and the control channel is changed among the

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repeaters according to a predetermined process (see col. 9, lines 7-31). Hagio discloses changing the control channel intermittently (see constitution). Talaro or Hagio do not specifically disclose skipping those repeaters at which the traffic channel is busy.

However, OFFICIAL NOTICE is taken that using free channel and skipping busy channel is a common and well-known technique. Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to skip a busy channel and use a free channel in order to avoid interference.

6. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Talaro in view of Newberg.

As to claim 6, Talaro discloses a base station wherein: each repeater includes allocation of the control channel from one repeater to another (see col. 9, lines 7-31). Talaro do not specifically disclose that respective channel controllers determine the channel allocation. Newberg discloses repeater, which includes a controller (see col. 3, line 60 – col. 4, line 9). Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to combine these teachings to have an intelligent repeater that uses free channels for an interference free communication.

7. Claim 2, 8 and 12-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Talaro in view of Hagio as applied to claims 3-4, 7 and 9-10 above, and further in view of Mullins.

As to claims 2, 8 and 12-13, Talaro discloses everything claimed as explained above except for a method wherein: the predetermined process includes a round robin poll of traffic channels to locate a channel not currently busy with traffic. Hagio discloses

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changing the control channel intermittently (see constitution). Mullins discloses the method wherein: the predetermined process includes a round robin poll of traffic channels to locate a channel not currently busy with traffic (see par. 0079). Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to combine these teachings for the simple purpose of selecting a channel without interference.

As to claims 14-20, Talarino discloses a radio network including a base station (see col. 1, lines 8-11).

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Mikuni U.S. Patent US006400704B2
- b. Childress U.S. Patent US005574788A
- c. Beasly U.S. Patent US005634191A

Any response to this Office Action should be mailed to:

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Or faxed to:

(703) 703-872-9314

For formal communication intended for entry, informal communication or draft communication; in the case of informal or draft communication, please label "PROPOSED" or "DRAFT"

Hand delivered responses should be brought to:

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Crystal Park II
2121 Crystal Drive
Arlington, VA
Sixth Floor (Receptionist)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marcos L Torres whose telephone number is 703-305-1478. The examiner can normally be reached on 8:00am-5:30pm alt. Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William G Trost can be reached on 703-305-5318. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

Marcos L Torres
Examiner
Art Unit 2683

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WILLIAM TROST
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600